

Date	Cat	WBS	Spec	Serial	Drawing Description	Work Description	qty req.	San Mateo unit cost	San Mateo subtotal	Hi-Grade welding & Mfg. Inc. unit cost	Hi-Grade welding subtotal	Progressive unit cost	Progressive subtotal
8/9/2004	3892	136	MD	330508	US/CMS ECAL Tracker 3KW Power Supply Chassis Top Cover	Hot or cold rolled steel sheet 16ga with electroplate zinc and chromate finish drilling and forming	12	\$38.89	\$466.68	\$40.85	\$490.20	\$83.00	\$996.00
8/9/2004	3892	136	MD	330509	US/CMS ECAL Tracker 3KW Power Supply Chassis Bottom Cover	Hot or cold rolled steel sheet 16ga with electroplate zinc and chromate finish drilling and forming must install 6- self-clinching nuts M5x0.8	12	\$32.08	\$384.96	\$37.85	\$454.20	\$65.50	\$786.00
8/9/2004	3892	136	MD	330510	US/CMS ECAL Tracker 3KW Power Supply Chassis Front Panel	Hot or cold rolled steel sheet 16ga with electroplate zinc and chromate finish drilling and forming must install 12 self-clinching nuts M5x0.8	12	\$25.29	\$303.48	\$50.70	\$608.40	\$93.00	\$1,116.00
8/9/2004	3892	136	MD	330511	US/CMS ECAL Tracker 3KW Power Supply Chassis Back Panel	Hot or cold rolled steel sheet 16ga with electroplate zinc and chromate finish drilling and forming must install 12 self-clinching nuts M5x0.8	12	\$25.29	\$303.48	\$50.45	\$605.40	\$95.50	\$1,146.00
8/9/2004	3892	136	MD	330515	US/CMS ECAL Tracker 3KW Power Supply Cooling Plate	copper plate 93mils thick OFHC drilling and forming	12	\$109.61	\$1,315.32	\$163.50	\$1,962.00	\$84.00	\$1,008.00
8/9/2004	3892	136	MD	330516	US/CMS ECAL Tracker 3KW Power Supply Transformer Bracket	material 6061-T4 Alum 1/8 thick drilling and forming must install 8 M5x0.8 self clinching nuts. Finish gold irridite.	36	\$27.08	\$974.88	\$29.65	\$1,067.40	\$36.00	\$1,296.00
8/9/2004	3892	136	MD	330518	US/CMS ECAL Tracker 3KW Power Supply Cooling Plate Assembly	copper tubing (9mm OD x 216mm long) to be soldered to cooling plate using suggested technique or equivalent. Flatness after soldering essential. Assembly cleaned and plated in bright tin. 2- 3/8 flare fittings needed. Cost Estimate based on experience.	12	\$150.00	\$1,800.00	\$150.00	\$1,800.00	\$150.00	\$1,800.00
8/9/2004	3892	136	MD	330519	US/CMS ECAL Tracker 3KW Power Supply - Power Bus	Material OFHC copper 0.093 thick cut and drilled and plated in bright tin	24	\$19.54	\$468.96	\$20.85	\$500.40	\$51.30	\$1,231.20
8/9/2004	3892	136	MD	330521	US/CMS ECAL Tracker 3KW Power Supply Side Plate	Material 6061-T4 alum 1/8 thk. Cutting, drilling and forming with gold irridite finish. Must install 6 - M5x0.8 clinching nuts	24	\$16.94	\$406.56	\$33.15	\$795.60	\$46.00	\$1,104.00
8/9/2004	3892	136	MD	330523	US/CMS ECAL Tracker 3KW Power Supply Control XFMR Bracket	material 6061-T4 Alum 1/8 thk requires cutting, forming and drilling. Finish gold irridite. Must install 3- M5x0.8 self clinching nuts	12	\$20.14	\$241.68	\$57.50	\$690.00	\$79.50	\$954.00
8/9/2004	3892	136	MD	330524	US/CMS ECAL Tracker 3KW Power Supply Relay Bracket	material 6061-T4 Alum 1/16 thk. requires cutting, forming and drilling. Finish gold irridite.	12	\$27.36	\$328.32	\$27.55	\$330.60	\$54.50	\$654.00

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8/9/2004	3892	136	MD	330525	US/CMS ECAL Tracker 3KW Power Supply Xfmr CAN	1/8 alum spinning cost per lowa spinners \$15.55 +\$500 setup	33	\$30.70	\$1,013.10	\$30.70	\$1,013.10	\$30.70	\$1,013.10
10/18/2004	3892	136	MD	330528	US/CMS ECAL Tracker 3KW Power Supply Terminal Block Support	material 6061-T4 Alum 1/16 thk. requires cutting, forming and drilling. Finish gold irridite. Must install 8- M4x0.7 self clinching nuts	12	\$32.33	\$387.96	\$41.10	\$493.20	\$67.50	\$810.00
10/18/2004	3892	136	MD	330530	US/CMS ECAL Tracker 3KW Power Supply Inductor (choke) Bracket	material 6061-T4 Alum 1/8 thk. requires cutting, forming and drilling. Finish gold irridite. Must install 2- M5x0.8 self clinching nuts	12	\$36.03	\$432.36	\$39.90	\$478.80	\$56.00	\$672.00
12/13/2004	3892	136	MD	330532	US/CMS ECAL Tracker 3KW Power Supply Power Bus Insulator	Material 5 mil Kapton requires punching and cutting	24	\$10.75	\$258.00	\$12.45	\$298.80		\$0.00
<b>Total Cost per vendor for pre-production build 12 units</b>									<b>\$9,085.74</b>		<b>\$11,588.10</b>		<b>\$14,586.30</b>
					<b>Documentation Website</b>								
					Files are available in pdf, Autocad2000 and Autocad DXF R14								
					<a href="http://www-ppd.fnal.gov/EEDOffice-w/Projects/CMS/LVPS/index.html">http://www-ppd.fnal.gov/EEDOffice-w/Projects/CMS/LVPS/index.html</a>								
					select <a href="#">Design Phase Documents</a>								
					select <a href="#">Mechanical Components</a>								
					select <a href="#">48V 3000 Watt PS</a>								